

$$\varepsilon = 10^{-4}$$

$$\lambda_i = \frac{2\langle \mathbf{n}_i + \langle \mathbf{n}_i, \mathbf{n}_j \rangle \mathbf{n}_j, \mathbf{v}_j - \mathbf{v}_i \rangle}{1 - \langle \mathbf{n}_i, \mathbf{n}_j \rangle^2 + \varepsilon}$$

$$\lambda_j = \frac{2\langle \mathbf{n}_j + \langle \mathbf{n}_j, \mathbf{n}_i \rangle \mathbf{n}_i, \mathbf{v}_i - \mathbf{v}_j \rangle}{1 - \langle \mathbf{n}_j, \mathbf{n}_i \rangle^2 + \varepsilon}$$

$$\mathbf{q}_{ij} = \frac{1}{2}(\mathbf{v}_i + \mathbf{v}_j) - \frac{1}{4}(\lambda_i \mathbf{n}_i + \lambda_j \mathbf{n}_j)$$

where

$$\mathbf{v}_i \in \mathbb{R}^3$$

$$\mathbf{n}_i \in \mathbb{R}^3$$

$$\mathbf{v}_j \in \mathbb{R}^3$$

$$\mathbf{n}_j \in \mathbb{R}^3$$